

between aldehyde groups and carboxyl groups being between 25/75 and 80/20.--

--16.(New) An oxidized carbohydrate according to claim 15, containing on average 0.1-1.5 carboxyl groups and 0.5-1.9 aldehyde groups per oxidized 1,2-dihydroxyethylene group.--

--17.(New) An oxidized carbohydrate according to claim 16, containing on average 0.5-1.3 carboxyl groups and 0.7-1.5 aldehyde groups per oxidized 1,2-dihydroxyethylene group.--

--18.(New) An oxidized carbohydrate according to claim 15, containing on average 0.1-1.2 carboxyl groups and 0.3-1.2 aldehyde groups per repeating unit.--

--19.(New) An oxidized carbohydrate according to claim 15, wherein the carbohydrate is selected from starch, amylose, amylopectin and modifications thereof.--

--20.(New) An oxidized carbohydrate according to claim 15, wherein the carbohydrate is selected from cellulose and modifications thereof.--

--21.(New) An oxidized carbohydrate according to claim 15, wherein the carbohydrate is a 2,1-fructan.--

--22.(New) A process for producing an oxidized carbohydrate containing aldehyde groups and carboxylic acid groups, the ratio between aldehyde groups and

090300-12808860
cat

carboxyl groups being between 25/75 and 80/20, the process comprising oxidizing a dialdehyde carbohydrate obtainable by oxidizing a carbohydrate containing 1,2-dihydroxyethylene groups in its repeating units, the oxidation of the dialdehyde carbohydrate being performed with a catalytic amount of molecular halogen.--

--23.(New) A process according to claim 22, wherein the oxidation with molecular halogen is performed at a pH between 3 and 7.--

--24.(New) A process according to claim 22, wherein the molecular halogen is produced in situ by reaction of halide with a carboxylic peracid.--

--25.(New) A process according to claim 22, wherein the molecular halogen is molecular bromine.--

--26.(New) A process for producing an oxidized, amino-substituted carbohydrate, comprising reductively aminating residual aldehyde groups in the oxidized

carbohydrate obtained by the process according to claim 22.--

--27. (New) An amino-substituted oxidation product derived from a carbohydrate containing 1,2-dihydroxyethylene groups in its repeating units, these dihydroxyethylene groups having at least partially been oxidized to dialdehyde groups, the product containing on average 0.1-1.5 carboxyl groups and 0.1-1.9 substituted amine groups per oxidized 1,2-dihydroxyethylene group.--

--28. (New) An amino-substituted oxidation product according to claim 273, containing on average 0.1-1.2 carboxyl groups and 0.3-1.2 substituted amino groups per repeating unit.--

--29. (New) An amino-substituted oxidation product according to claim 27, wherein said substituted amino group has the formula $-NR^1R^2$, wherein R^1 represents hydrogen, a C_1C_{20} alkyl, alkenyl or alkynyl group optionally substituted with carboxy, hydroxy, C_1C_{12} alkoxy,

amino, carbamoyl and/or aryl, including natural and synthetic amino acid residues, and R² represents hydrogen, amino, substituted amino, hydroxy, alkoxy, or a C₁-C₁₂ alkyl, alkenyl or alkynyl group optionally substituted with carboxy, hydroxy, C₁-C₁₂ alkoxy, amino and/or carbamoyl, or a substituted iminomethyl group, or R¹ and R², together with the nitrogen atom to which they are bound, represent a three- to seven- membered heterocyclic system, optionally containing one or more further heteroatoms selected from nitrogen, oxygen and sulphur and optionally substituted with carboxy, hydroxy, oxo, C₁-C₁₂ alkyl, alkenyl, alkynyl or alkoxy, amino, carbamoyl and/or aryl.--

R E M A R K S

The above changes in the claims merely place this national phase application in the same condition as it was during Chapter II of the international phase, with the